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WISDOM IS COMMON SENSE TO AN UNCOMMON DEGREE

# THE REA LINEMAN

RURAL ELECTRIFICATION ADMINISTRATION

U. S. DEPARTMENT OF AGRICULTURE

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## "DON'T NEED RUBBER GLOVES," LINEMAN SAYS JUST BEFORE FATAL ACCIDENT

### DANGEROUS FOR FARMERS TO CUT TREES NEAR CO-OP LINE, BARFIELD ASSERTS

V. H. Barfield, Safety Instructor for REA systems in South Georgia, recently told employees of the Altamaha Electric Membership Corporation about the hazards in operating electric power lines.

He called particular attention to the dangers involved in farmers cutting trees along the power lines of the cooperative without necessary tools and instructions. He told the workers that anyone contemplating tree-cutting near a co-op line should notify the co-op manager, who will then decide whether to send co-op employees to de-energize the power line or to furnish necessary equipment to keep the tree from falling into the line.

Mr. Barfield's services were obtained by the joint effort of Georgia cooperatives and the State Department of Education. It is felt that his work will be of benefit not only to co-op employees but also to all cooperative power consumers in this section of the state.

(Reprinted from The Lyons Progress, Lyons, Ga.,  
July 5, 1945)

### PROTECTIVE GROUND IS IMPORTANT! ARE YOU OVERLOOKING IT?

by Laurence C. Meyer, Supervisor  
Michigan REA Safety and Job Training

Is the importance and necessity of protective ground being overlooked? Remember that the only positive way of knowing that the primary conductor is dead is to have it grounded to the neutral within sight of the working area.

We grant that there are occasions when a protective ground doesn't seem to be absolutely necessary, — clear day, no power crossings, short

(Continued on page 4)

### UNUSED GLOVES FOUND IN TRUCK

#### EXPLANATORY DIAGRAM ON PAGE 3

Climbing a pole and removing a live line clamp attaching the phase jumper to line, without rubber gloves, recently resulted in a fatal accident to an REA co-op lineman.

The injured man was removed from the pole and taken to a hospital. He died nine days later.

In reporting this accident, the co-op manager gave an extremely clear and complete account, concluding with this comment:

"The cause of the death was primarily due to lack of caution on the part of the lineman. The groundman warned him about the lack of gloves but he remarked he would not need them on this job.

"He had been cautioned many times never to attempt to work on energized line without rubber gloves. Two pair of recently-tested rubber gloves were later found in the truck." (Editor's Note—Please turn to page 3 for explanatory diagram of this accident.)

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for Employees of REA Systems

David A. Fleming, Editor

(IN FIVE EASY LESSONS)

*The burns were on the hands,  
The gloves hung on my belt.  
Was sure I wouldn't need them,  
The line had done been kilt.*

*The burns were on the hands,  
The gloves were in the truck.  
This job did not require them  
I'm always long on luck.*

*I've done this job a thousand times,  
I've always thought before,  
The burns were on the hands,  
I don't need gloves any more.*

*I can't climb that pole with gloves,  
It's as clumsy as can be.  
I'll put 'em on when I safety off  
That's soon enough for me.*

*The burns were on the hands,  
I climbed too high, I guess.  
Didn't think I'd grab the phase  
It must be carelessness.*

*Gloves from the ground up,  
As I see from past events,  
Isn't half so bad because  
It stops those accidents.*

## RUBBER GLOVES IN THE TRUCK DON'T DO YOU ANY GOOD

On May 12, 1942 the REA Safety Unit issued a memo advocating the use of rubber gloves from the ground up. The adoption of this policy was the result of a careful analysis of electric shock accidents for the year 1941. Eighty-three percent of these electric shock accidents were due to current entering the body through the hands. In other words, had rubber gloves been on the hands at the time of contact, these accidents could have been prevented.

A short time ago we made another analysis of electric shock accidents. One hundred electric shock accidents were picked at random from the general file covering several years. Note that 77 of the 100 accidents could have been prevented by the use of rubber gloves from the ground up.

Many of the 77 felt that the time to put on rubber gloves was when the neutral or first low voltage area was reached. Some looked the job over and decided that rubber gloves were not needed. Some intended to use rubber gloves but when they reached for them, discovered that they had left them in the truck.

There is no indication that the injured thought he was risking his life by failing to wear rubber gloves. They were linemen doing the routine jobs of their trade. These same jobs had been performed in the same way many times without injury. A false sense of security had been built up because in each of these cases the injured had failed to take into account the unexpected circumstance—"hooks cut out, grabbed phase"—"wind blew victim off balance"—"tool slipped"—"did not intend to climb near primary"—"thought line was dead"—"hand brushed live jumper"—etc., which caused the contact with live conductor or fixture.

Ask the man with a hand or foot burned off if the inconvenience of wearing rubber gloves from the ground up is too high a price to pay for a hand or foot. Ask the man who, in the act of

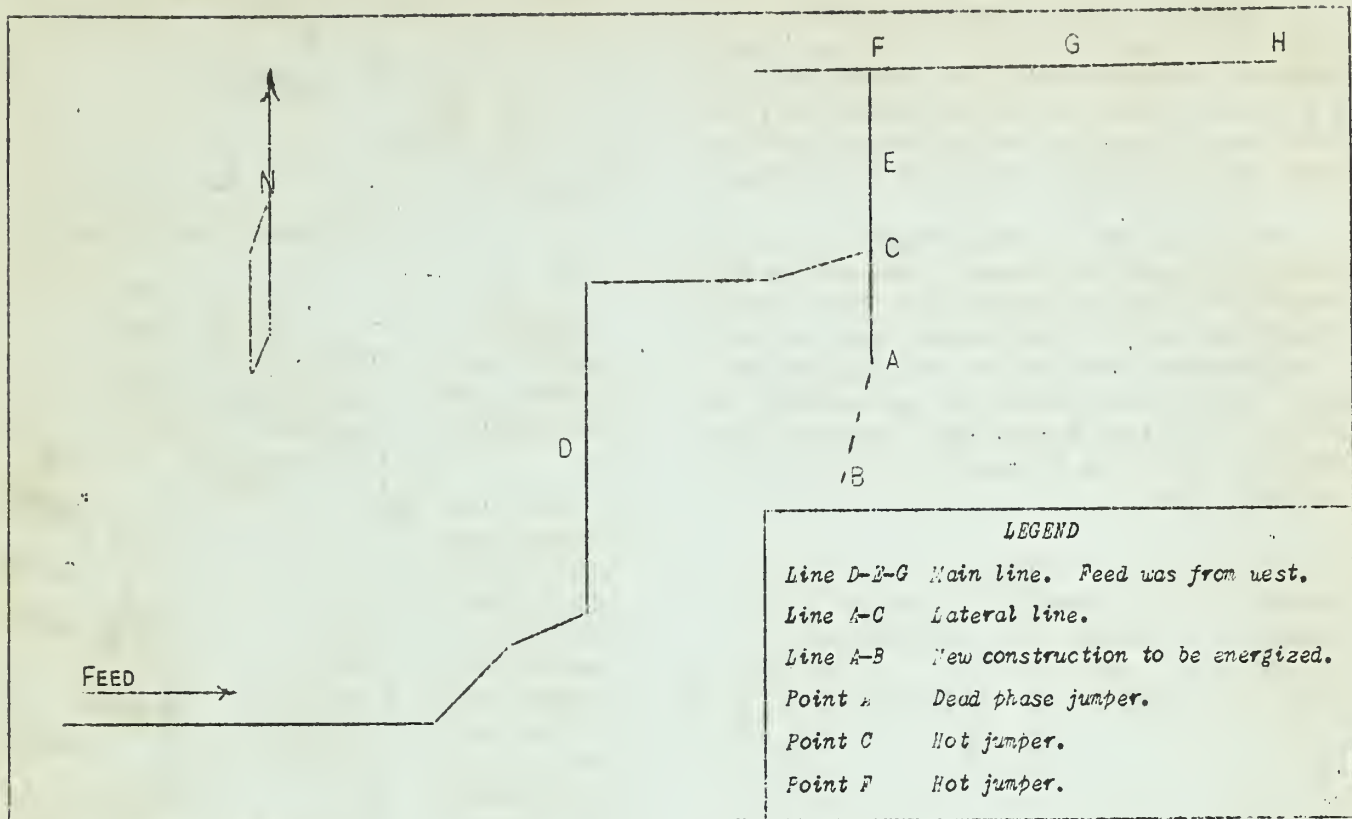
safetying off preparatory to putting on his rubber gloves, made hand contact and was knocked from the pole; ask him if the clumsiness of climbing in rubber gloves is too high a price to pay for avoiding the unforeseen occasion resulting in a broken back and the prospect of spending the remainder of his life in bed.

What about the man who paid with his life? How would he feel about the inconvenience of climbing in rubber gloves?

Wearing rubber gloves from the ground up assures that the hands will be protected if and when the need arises. Our accident record proves that from 77% to 83% of electric shock accidents are due to hand contact. Observance of this policy will prevent 8 out of every 10 electric shock accidents. We ask you, is it worth while?



# NO GLOVES-NO PROTECTION-ONE DEAD



## THE SITUATION

An extension (A-B) had been completed to lateral line (A-C) which was hot up to point (A). Feeling that it was unsafe to climb pole (A) and attach the jumper the lineman decided to kill the main line and hook up (A-B) cold.

Apparently he became confused in regard to the direction from which this line fed. Instead of going to pole (C) and removing the tap line jumper, thus killing line (B-A-C), he went on to pole (F) and removed the jumper which de-energized line (G) from (F to H.) The tap line (A-C) was still hot because the feed was from the west.

The fact that stub line (A-C) was hot but

thought to be dead, did not cause the accident, though it might have done so later when the jumper at (A) was connected to line (A-C).

## THE ACCIDENT

The lineman climbed pole (F) and, with a 5-ft. hot stick and no rubber gloves, removed the live line clamp attaching the phase jumper to line (G). Since he was confused about the feed, he now thought that everything south and west of him, including the jumper still attached to his hot stick, was dead. At this point the clamp became detached from the head of the hot stick and came in contact with his right hand and the right side of his face. It appears that the left climber was in contact, or very nearly so, with the ground wire on the pole.

## "UNTIL THE DOCTOR COMES"

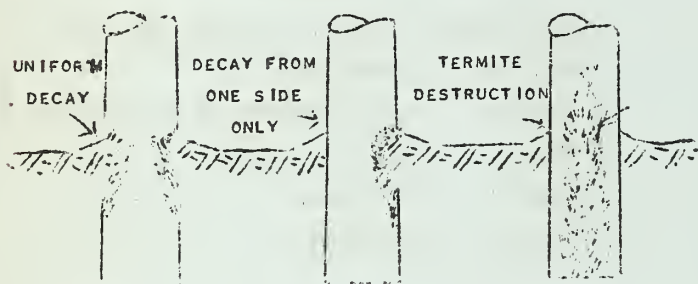
"Until The Doctor Comes," United States Public Health Service Pamphlet, is being mailed to all co-ops. Each co-op will receive three copies to be used in the interest of first aid.

The booklet is not intended to serve as a complete first aid manual, or to encourage self-treatment, but may be useful to the many cooperative employees who have completed the Standard Red Cross First Aid Course. It covers: Treatment of wounds; sprains, strains, bruises; poisonous snake bites; insect stings; dog bites; splinters; foreign body in the eye; nose bleed; electrical accidents; suffocation; dislocations; fractures; injuries due to heat and cold, and poisons.

## INSPECT BEFORE YOU CLIMB!

A careful inspection should be made of all poles at the ground line before climbing. Probe completely around the pole at the ground line with a blunt bar. Never use a sharp pointed bar, as this opens up the pole and allows moisture to penetrate to the center, which will cause damage.

Ground-line rot may extend from a few inches above the ground line to twelve inches below the ground line. Treated poles do not decay evenly around the entire circumference, but are more likely to decay from one side only because some areas may not have absorbed as much creosote as others. If a test is made from the good side only, the lineman may be unaware that the pole is unsafe to climb.



Termites attack poles from the inside, leaving no external evidence of their destruction. As a rule, these insects do more damage at the top than at the ground line. But termites sometimes destroy poles at the ground line, leaving a hollow shell which breaks when the pole is climbed.

Make a habit of testing poles before climbing. The injury is always serious when a pole breaks. Gravity pulls the lineman underneath as the pole falls. In addition to striking the ground with great force, the victim must also absorb the crushing force of the pole.

## PROTECTIVE GROUND IS IMPORTANT

(Continued from page 1)

line, and besides you "opened the line yourself"; but we still urge their use, as a matter of habit development. If we use protective grounds at these times, when they don't look too necessary, the chances are that we will have them on when that rare occasion arises when conditions are such that we do need them.

Don't lose sight of the number of electric burns that could have been avoided by the use of protective grounds. Remember, there is no difference between the appearance of a "hot" and a "cold" wire.

## THE LINEMAN'S CARTOON GALLERY

### TO OUR READERS

HERE'S A NEW FEATURE. WE HOPE YOU LIKE IT.

IF YOU FIND OTHER CARTOONS SUITABLE FOR THIS DEPARTMENT SEND THEM IN. BETTER YET, IF YOU CAN DRAW A CARTOON YOURSELF, LET US PRINT IT!

*The Editor*

### YOU CAN NEVER BE TOO SURE!



## HIT THE NAIL, NOT YOUR HEAD



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